## Forum Series on the Role of Institutions in Promoting Economic Growth

# Institutional Incentives Within USAID: How do They Affect Projects Outcomes?

## **CARLOS ESPINA AND CLIFFORD ZINNES**

Forum 5
NIE-Based Toolkits for USAID Applications

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## Institutional Incentives Within USAID: How Do They Affect Projects Outcomes?

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February 14, 2003

### **Executive Summary**

Without accurate and reliable performance data, USAID has little assurance that its programs achieve their program objectives and related targets...Further, USAID ha[s] conducted few evaluations of its experience in using various funding mechanisms and types of organizations to achieve its objectives around the world. Some of the essential information that USAID would need to conduct such evaluations, such as data on the types of implementing organizations, funding mechanisms, and objectives in its various program areas... is not complete or sufficiently detailed (emphasis added). U.S. General Accounting Office (GAO), January 2003.

#### The Challenge

For years, USAID has recognized the inherent challenges it faces to assess the effectiveness of its activities, highly motivated staff, and their contractors. Policy assistance has proved particularly difficult in this respect. Nevertheless, over the last decade USAID has experimented with many approaches, from expensive dedicated outside evaluation teams through to the R4 process and its recent variants. While part of the problem is that it seeks to fulfill a multitude of simultaneous—and sometimes conflicting—objectives, of which "effectiveness" is only one, there is still a general feeling that there remains much room for improvement. The advent of the Millennium Challenge Account has further focused minds within USAID on the importance of "proving" to Congress and the Administration the value of its technical assistance and expertise.

In this paper, while not resolving all these concerns, we describe a conceptual frame work and set of low-cost diagnostic tools which would go some way to provide management with some statistically rigorous analysis with which to track and evaluate the effectiveness of internal procedures, technical assistance programs, and funding and procurement mechanisms. Our approach is based on developments in the new institutional economics (NIE), which predicts that the effectiveness of a USAID intervention will also depend on institutional factors *within* USAID itself and the incentives these factors create for its staff and contractors. Congressional earmarking and field mission-Washington dynamics only serve to further underscore the role institutional processes have on outcomes.





#### Assessment requires data – and USAID already has it!

We are all colloquially familiar with many concrete examples of incentive problems within USAID. Many of these are amenable to an NIE-based analysis. However, evaluating them systematically requires not only an approach based on new institutional economics, but also data. Fortunately, USAID already possesses a wealth of untapped information and data on its technical assistance, grant, training as well as other activities over the years—though they are scattered throughout its branches—with which it could construct a suitable database. As an example, we identified over 200 USAID SME activities from which we collected the requisite data on a subsample. With mission assistance, this information could be retrospectively compiled for any programmatic sub-area of interest. USAID could even more easily collect such information for its future projects. In this way, not just the aid recipients but the donor, itself as an organization can "learn by doing".

#### We provide the diagnostic tools to analyze the data...

We also develop an associated set of diagnostic tools to take advantage of the institutional information in such a database. Designed specifically for applications under the NIE conceptual framework above, these empirical tools would permit USAID to evaluate—and therefore address—many of the financing, contracting, and organizational issues and related areas of concern raised by the GAO report. These diagnostic tools depend on a more systematic collection of information on project characteristics, outcomes, procurement vehicle, and implementer characteristics. As such, the tools could be further improved by detailed discussions with USAID on the specification of the database variables. Nonetheless, the purpose here is to demonstrate that there are tools and the requisite information available *now* that can improve on the current state of knowledge about issues that the GAO suggests are unexamined.

#### ...but to evaluate USAID programs and procedures, not individual projects

Our approach may be unusual compared to past USAID evaluation efforts in several ways. First, our tools are not specifically focused on evaluating individual projects. Rather, they evaluate, for example, groups of projects, entire programs, funding mechanisms, and types of partner organizations. While this lack of an individual project orientation may appear to be a drawback, it is in fact a strength. This is because, first, there will be greater cooperation from the field with data reporting if those collecting the data understand they are not being judged on the results. Second, this approach overcomes the frequent criticism of retrospective project evaluation that there are simply too many unique events contemporaneous with the technical assistance to allow rigorous evaluation of its impact. Third, our approach is arguably objective and—equally importantly—statistically rigorous, unlike most evaluations to date for which the relevant counterfactual is at best unclear. Finally, because it is firmly rooted in the theory of NIE, our approach is more than just descriptive: it also points to how to remediate the institutional weaknesses identified.

#### We recommend...

Our paper ends with two sets of recommendations. The first set summarizes our findings related to our examples on how to empirically evaluate the impact on project success of specific incentive misalignments which current institutional arrangements within USAID foster. These include the impact of earmarking, staff rotations, process of contract amendment and rene gotiation, and indefinite quantity ontracts. The second set proposes specific steps forward should USAID consider implementing a pilot of the evaluation approach developed in the paper.

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Forum 5: NIE-Based Toolkits for USAID Applications

# Institutional Incentives Within USAID: How do They Affect Projects Outcomes?

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#### 1. Introduction

For years, USAID has recognized the inherent challenges it faces to assess the effectiveness of its activities, highly motivated staff, and their contractors. Policy assistance has proved particularly difficult in this respect. Nevertheless, over the last decade USAID has experimented with many approaches, from expensive dedicated outside evaluation teams through to the R4 process and its recent variants. While part of the problem is that it seeks to fulfill a multitude of simultaneous—and sometimes conflicting—objectives, of which "effectiveness" is only one, there is still a general feeling that there remains much room for improvement. The advent of the Millennium Challenge Account has further focused minds within USAID on the importance of "proving" to Congress and the Administration the value of its technical assistance and expertise.

In this paper, while not resolving all these concerns, we describe a conceptual frame work and set of low-cost diagnostic tools which would go some way to provide management with some statistically rigorous analysis with which to track and evaluate the effectiveness of internal

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procedures, technical assistance programs, and funding and procurement mechanisms. Our approach is based on developments in the new institutional economics (NIE), which predicts that the effectiveness of a USAID intervention will also depend on institutional factors *within* USAID itself and the incentives these factors create for its staff and contractors. Congressional earmarking and field mission-Washington dynamics only serve to further underscore the role institutional processes have on outcomes.

As described at length in Zinnes and Bolaky (2002), the performance of USAID is heavily influenced by the formal and informal organizational rules within USAID. Examples include ADS procedures, rotation processes of staff, use of PSO, seniority rules, interactions between the COTR and contracting officers, informal use of contractors to write terms of reference, volatility of objectives over the course of the programming cycle (not to mention the fiscal year), vagaries of the budgeting process, stove-piping of strategic objectives, relationships between USAID officers and the large consulting firms, degree of pre- and post-project appraisal, relation between staff rewards and project effectiveness, and, of course, this is just the tip of the iceberg.<sup>2</sup>

These examples have in common the existence of purpose-built or unintentional incentives on those involved with USAID. The examples also tend to reflect interactions and relationships among those involved. In the language of NIE, USAID operates as a dense overlay of institutional games, complete with "players", strategies, payoffs and even penalties. Institution failures can occur as the game leads to potential misalignments between formal organizational objectives and the incentives hierarchically as well as horizontally within the organization. The distribution of responsibilities between USAID/Washington and the missions further complicate the game. These non-mission-relevant incentives may influence the choice of activity, its design, and even the contract method. These insights imply that improving the effectiveness of USAID will require analyzing how the key characteristics of the actors (USAID staff as well as implementers) as well as procedures (contracting) affect the outcomes of projects. As we shall see, the

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<sup>&</sup>lt;sup>1</sup> Lee Benham, in his discussant comments, cautions here of the need to distinguish between organizational and institutional analysis. In this paper, we follow Doug North in understanding that "[i]nstitutions are the rules of the game ... or, more formally, are the humanly devised constraints that shape human interaction. ... In the jargon of economists, institutions define and limit the set of choices of individuals" while understanding an "organization" as an institution plus a group of individuals seeking to achieve some common goal (maximize an objective function).

While mentioning a number of these in her discussant comments Emmy Simmons also underscored the "people" nature of the problem and how they talk and negotiate with each other, an example being the "cultural differences" between the three civil service groups employed at USAID (FS, GS, and FSN).

salient characteristics will vary depending on the step of the USAID programming cycle (the design, implementation, monitoring, and evaluation).

We are all colloquially familiar with many concrete examples of incentive problems within USAID. Many of these are amenable to an NIE-based analysis. However, evaluating them systematically requires not only an approach based in new institutional economics, but also data. Fortunately, USAID already possesses a wealth of untapped information and data on its technical assistance, grant, training as well as other activities over the years—though they are scattered throughout its branches—with which it could construct a suitable database.

Our analysis draws from a series of stylized facts on the projects that we were able to assess, the planning and monitoring guidelines that USAID has issued and their impact on project success, and the econometric class of models that may be used to estimate the structural elements and relations contained in the former. The discussion, although informal, views the operation of USAID through the lens of NIE. This allows us to recognize many of the regularities observed in USAID project outcomes as manifestations the governance structures NIE addresses (e.g., principal-agent problems, transaction costs, institutional misalignments and incomplete contracting).

To make this point, we take as an example the case of USAID activities in support of SMEs. USAID has a long track record in support of SMEs as well as a massive, if uneven, amount of documentation describing the outcomes and even quality of these interventions. It would seem both incumbent and expedient for USAID to assess this rich archive for clues on how these characteristics influenced the extent of project success or failures and, perhaps, on options for their amelioration. We identified over 200 USAID SME activities from which we collected the requisite data on a sub-sample. An analysis of such data could allow USAID to infer how the odds of success of a representative SME activity might be influenced by the choice of procurement mechanism and the characteristics and relationships among staff within USAID and between USAID and its implementers. Such insights would permit USAID to better program, design, and implement SME activities.

While outside the scope of the present paper, there remains the question of whether having results of the diagnostic tools proposed herein would lead to actions to remediate the

<sup>&</sup>lt;sup>3</sup> This task is different from the one carried out by Clapp-Wincek and Blue (2001), who evaluated the USAID evaluation process, itself.

"institution failures" identified and analyzed. Put differently, is there an effective demand for change at USAID? Can any organization self-reform or is this an oxymoron? Perhaps these questions require moving outside the realm of NIE to an analysis of the political environment within which USAID is embedded. In the field of political science, the theory of bureaus and public agency predict that public bureaus without a strong political base will be weak, frequently shaken up, not trusted, and subject to forward delegation. This same literature, however, predicts that for these very reasons, such bureaus will endeavor to build political alliances to protect themselves from the executive branch. Moreover, such bureaus will see self-imposed evaluation as an effective defense against outside oversight. If this is right then, even if there is no endogenous demand for reform, perhaps there could be a demand stimulated at the upper levels of USAID for the diagnostic tools proposed here and by others.

The paper is organized as follows. Section 2 introduces the reader to the "new" institutional economics (NIE) and describes the aid process of USAID from an NIE perspective. It then illustrates the types of practical questions to which the tools we develop later can be applied and relates them to key NIE principles. Addressing these questions takes information and analysis. Section 3 describes a practical database USAID could construct from information and data it already possesses. In Section 4 we elaborate three different classes of NIE diagnostic tools (econometric analyses) in applications which illustrate how USAID might use the data to analyze—and remediate where desired—specific institutional incentives adversely influencing the effectiveness of its activities. Section 5 concludes with a series of recommendations for further consideration.

## 2. Framing the NIE problem for USAID

In this section, we start by summarizing some proto-typical NIE scenarios. With these as a backdrop, we place the USAID organizational environment into the perspective of institutional economics.

<sup>4</sup> Dan Blumhagen, during Forum 5 expressed a concern that even if this type of analysis were instituted, the creation of effective incentives would still require a demand by senior management for the results and to act upon them. He appears to believe that profound institutional barriers in the organization militate against such.

<sup>5</sup> Mary Shirley, during Forum 5, however, expressed a somewhat opposite view, namely, that outsiders cannot change an institutional culture. You have to first change their beliefs and their knowledge base.

<sup>&</sup>lt;sup>6</sup> For this point and the thoughts that follow in the rest of this paragraph, the authors draw upon observations made by Robert Bates at Forum 5.

#### 2.1 Models of common threats to good governance

The mechanisms and relations within USAID that comprise the aid process may be modeled taking into account its bureaucratic nature. There are several NIE problems that arise within USAID that might affect the odds of success of its projects, ranging from the principal-agent (PA) problems in the USAID DC-field missions and field mission-implementer stages, to contracting incompleteness and hold-up problems in the implementation process. This section will address only some of the relevant NIE issues that take place within USAID. The main objective is to theoretically—but informally—motivate the link between the institutional and contractual arrangements inside USAID and how project performance may be affected.

From the outset, we must recognize that USAID cannot be treated as a homogeneous entity, but as a compendium of organizations seeking to fulfill multiple objectives, from US foreign policy goals, to USAID's strategic objectives within which specific activities in a country are implemented, to "Fly-American" airlines. As if this were not enough we find these goals are modulated by the COTR's *own* personal motivations. USAID is then presented with the problem of how to design mechanisms capable of achieving the goals of the organization by inducing its agents to supply their maximum effort. This is one of the conceptual underpinnings of NIE: the collective action problem, where agents may fail to supply the necessary effort to solve the problems of the group. While this class of problems encompasses a vast variety of issues central to NIE, we by introducing only the four.

The principal-agent (PA) problem. This is a defining characteristic of every organization where an employee (the agent) is hired to take certain actions on behalf of the employer (the principal). The actual problem is rooted in the fact that the optimal action that the principal wants to induce is dependent on some information only known to the agent. This asymmetry in information is what causes inefficiencies in the outcomes, as the agent will only report crucial information to the principal if she is given incentives to do so. In the context of USAID, we can see that a PA problem may arise not only between the agency and some external firm (as it is the case between missions and external contractors), but also within USAID itself, when, for example, the Agency delegates in the operating units the design of the strategic plan that justifies the special and strategic objectives (SSO).

<sup>&</sup>lt;sup>7</sup> Emmy Simmons points out that in the USAID context the principal-agent model should be applied as a chain of principal-agent relationships, a theory we build on below.

<u>Incomplete contracts</u>. PA issues are caused by misalignments in interests between the parts and asymmetries in information. This makes contracting between parties a difficult endeavor not only by the inherent uncertainty of future contingencies but also because of the unobservability of crucial variables. A given contract, formal or informal, is defined to be incomplete if it fails to capture all possible contingencies and eventualities that affect the parties involved. It is not too difficult to see that this difficulty to write "complete" contracts may bring other problems, especially costly renegotiations to "fill in the gaps".

<u>Hidden-information problems</u>. There are numerous situations in which organizations are imperfectly informed of the *characteristics* of the agents (e.g., how productive or competent a contractor is). Because perfectly 'screening' each actor is a very costly transaction, the party offering the contract faces the challenge to design it in such a way that he can discriminate between different levels of competence or productivity. If USAID only offered contracts to implementers without any type of screening, they will most likely attract only those that are less productive. This problem is what we call adverse selection, as we end up hiring the low productivity type firms.

<u>Hidden-Action problems</u>. In this case one of the parties is imperfectly uninformed of the actions of the other. When this happens, the principal has to design a contract that provides the necessary incentives<sup>8</sup> to induce the agent to exert his maximum effort. In an ideal world with no information asymmetries and perfect monitoring of the agent, we could simply offer a fixed-price contract to achieve our goal, but it is precisely the impossibility of perfect monitoring what makes us embed the incentives in the contract. Just to cite an example, evaluating an activity may serve as a monitoring device for USAID/WDC when assessing the missions performance.

So, what does this all imply then for the success of aid programs? Since individuals have different goals, even within USAID, one needs to look at the stages that aid activities go through and identify the key actors involved. We need to know the objectives of these activities and whether the motives of the actors involved in these activities will lend itself to the realization of such objectives. The rules to understand are the rules and enforcement structures *they*, the actors perceive within USAID. We need to consider the degree to which the objectives of USAID's mission align with the incentives explicitly or unintentionally created by the way work (both by USAID's staff as well as its implementers) is awarded, monitored, and evaluated, by the contrac-

<sup>&</sup>lt;sup>8</sup> These can be in the form of performance-contingent wages, for example.

ting and amendment process, and by the processes of country and sector program design. These incentives may have a fundamental impact on the probability of project success.

#### 2.2 An brief overview of the USAID aid programming process

In this section we aim to identify the key actors and institutional arrangements<sup>9</sup> in the process of design, implementation and monitoring of USAID's activities, focusing on the NIE problems that arise in each stage of the aid cycle. Even though we recognize the complexity of the aid process, we will abstract from many of the details and focus on what we think are its structural and basic determinants.

Before an activity is implemented at the mission level, the planning process within USAID goes through several phases, starting with from the multi-year strategic plan (ASP) by the PPC to the activity approval submission from the strategic objective (SO) teams and operating units. Even though the details of the process of planning might be useful in studies where the design of such policies is the main subject, we are going to focus on the NIE issues that take place within USAID *given* these rules and enforcement framework and how this is related to the odds of success in activity implementation. We will try to extract the basic structure of the aid cycle as depicted in Murrell *et al.* (2002), in order to avoid unnecessary complications and simply expose PA side of the story<sup>10</sup>. In this section we intend to draw attention not only to the—albeit simplified—stages in the aid cycle but also to the set of empirical questions that elicit from the NIE issues present in these phases. Every hypothesis in this section is empirically testable and estimating the order of magnitude of these effects should be the focus of future analysis. The relevant actors for our analysis are the Congress, USAID DC, the field missions and the implementers of the activities.

We can conceive the workings of USAID activity design, implementation and evaluation into three different and sequential stages.

In the *first phase*, Congress delegates the administration and planning of aid programs to USAID (this planning stage comprises the whole process from parameter setting and ASP to activity approval). A textbook case of moral hazard and incentive-compatibility problem arises

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<sup>&</sup>lt;sup>9</sup> These are understood as the set of rules and enforcement mechanisms that define the interactions between agents.

<sup>&</sup>lt;sup>10</sup> There is a fundamental difference between the governance structure within a government agency and a private firm. Most notably, the usual 'solutions' to hidden-action problems through performance-contingent wages and promotions might have very little if any applicability in this context. One way to attenuate the moral hazard problems in government agencies is through optimally investing in monitoring the effort on the tasks they have delegated.

between the Congress and USAID (principal and agent respectively) given that the 'payoff of the principal depends on the (partially) unobservable actions of the agent. A set of empirical and theoretical questions arise immediately: Do projects developed using congressionally earmarked funds perform differently from those a mission proposes from its own discretionary funds? Do activities submitted in the rush before the end of the fiscal year (e.g., September) have a different probability of success *ceteris paribus* than those selected during the rest of the year? It is reasonable to expect an affirmative answer to these questions not only because of the PA problem between Congress and USAID but also as a consequence of differing objectives between the parties. Note that the answer per se is not as relevant as the order of magnitude of these effects on the odds of success of a project.

In the second stage, USAID will delegate the specifics of activity design and ways of implementation to the field missions<sup>11</sup>, potentially emerging another set of incentives problem within USAID (i.e. between USAID/W and the missions). 12 At this stage, the informational asymmetries induced by the internal policies of USAID on planning, implementing and evaluating a given activity play a crucial role on the impact and success of its projects. How is project success affected by the quality of information available for monitoring or evaluation? Has there been a statistically significant change in project success or failure after each structural change in USAID monitoring and evaluation procedures (e.g., after 1994 and after 1998)? Is there any evident regularity in the sub-sample of projects that were not evaluated? Are failed projects less likely to be evaluated? All these questions stem from NIE-related issues, not only through the PA problem described above but also from the implied governance structure that the directives within USAID impose<sup>13</sup>.

The third stage in the process is the contractual relationship between the mission and the contractor, who is in charge of the actual implementation of the activity. At this stage, the nature of the problem has both the characteristics of hidden-action and hidden-information models: the mission has the task to optimally choose which contractor to use, giving rise to a signaling game. Once the contractor is chosen, the hidden-action problem takes place, where the main task of the mission is to design an incentive-compatible contract that induces maxi-

<sup>&</sup>lt;sup>11</sup> Note that this is a simplification of the actual process of activity design. USAID DC uses the SO teams and operating units in the process of activity design but the field mission is the one that carries out the activities in a given country. This is why we abstract from the other instances between USAID DC and field missions in this stage.

<sup>&</sup>lt;sup>12</sup> We abstract from the multi-agent nature of this problem as the decision of which country (and thus which mission) will get aid can be seen as a decision 'exogenous' to USAID and entirely decided by the US government.

These policies are compiled in the Automated Directives System or ADS.

mum effort from the implementer<sup>14</sup>. Does it matter whether USAID hires US or local contractors? Does the type of contracting mechanism matter? Are some more effective for certain types of technical assistance? Under what conditions or types of technical assistance should USAID delegate execution to PVOs or for-profit companies? Does the type of contractual payment matter? Does it make a difference to the outcomes whether the contractors are given a cost-plus or fixed-fee contract?

For each of the above questions there is an incentive issue, a transaction cost, an information asymmetry, or a collective action problem. The relevance of these questions lies in the contracting design problem implied by the PA situation at the various stages of the aid process just described.

Note that the various linkages between the actors in the aid process affect the performance of projects through the implicit and explicit incentives embedded in the contractual arrangements that bind them. For instance, the lack of compulsory evaluations for activities at the mission level may worsen the moral hazard problem in the second stage, ultimately giving way to opportunistic (ex post) behavior on the mission side. This can affect the type and conditions of the contract that the mission is willing to offer the implementer (e.g., [give example]), decreasing the odds of having a successfully implemented project. The incentives misalignments in the AID DC-mission side might spillover to the next stage of the process, namely, the missionimplementer phase.

Moving away from the PA dimension of the problem to another NIE related issue within USAID is the *hold-up* problem that arises in almost every instance of the aid process. Specifically focusing on the mission-implementer side of the story, the nature of the contractual relation is incomplete not only due to informational asymmetries but also because of the immense difficulty to write a formal long-term contract that includes all possible eventualities in the future. This amounts to a problem of property rights 15 allocation of the ex-post gains from trade, provoking a hold-up problem, possibly from both sides 16. In the context of the mission-implementer relation, this type of incompleteness translates into transaction costs through contract renegotiation. A proxy for this renegotiation cost can be given by the number of amendments a given pro-

<sup>&</sup>lt;sup>14</sup> An interesting contract that can lower the search costs involved in choosing the implementer is the Indefinite Quantity Contract (IQC), which 'pre-qualifies' a contractor for an extended period of time.

15 These are broadly defined as claims from contractual obligations.

<sup>&</sup>lt;sup>16</sup> For a formal treatment of the hold up problem see Hart *et al.* (1986, 1998).

ject has undergone. From this, we can devise a set of questions related to the impact of contract renegotiation, specifically: How common are project amendments and are certain types of projects, contractors, or contracting mechanism more likely to be amended? Are amended projects more likely to fail? Do conclusions change if the amendment is a no-cost extension? Is a specific type of contract more likely to be renegotiated (as opposed to being simply amended) than others? If so, which way is the causality? Would moving to a renegotiation-proof contract reduce the hold up problem?

These are all questions that deserve special attention, not only from a conceptual and theoretical perspective but from an empirical point of view.

#### 2.3 Other related issues: time-horizon conflicts, evaluation and monitoring

There are many other NIE issues that are present in the aid process described above. Clearly, the USAID/WDC, the missions, and the beneficiaries may have completely different time-horizons when it comes to assessing if a given project has produced reasonable results. Many of the SME activities carried out by USAID may require years to yield sizeable outcomes, especially those projects that deal with training, technical assistance, investment promotion or improvements in administrative and regulatory environment. These types of projects may involve timeframes in excess of those implied by USAID's evaluation methods, making the very assessment of success an ambiguous endeavor. As a consequence, it is possible that missions and SO teams have incentives to focus on achieving the short-term intermediate results and not on the long-term goals.

It is also common, if not a defining characteristic of bureaucratic institutions, to have multiple objectives and multiple principals. A given activity by USAID may have to fulfill many (possibly exclusive) goals, ranging from aggregate objectives like the SOs to promoting US exports or even carrying out an evaluation of a given component. In this context, the incentives are significantly weakened.

Another aspect that deserves closer attention in the aid process is the role of evaluations. External evaluations have been the basic monitoring mechanism of USAID towards the missions. In principle, these could act as an incentive device to induce optimal performance by both the mission and the implementer.<sup>17</sup> Before 1994, evaluations were done with the "fly-in

<sup>&</sup>lt;sup>17</sup> An alternative, which IRIS and the Forums Project are promoting, is the use of prospective, randomized evaluation procedures. See Azfar and Zinnes (2003).

approach"<sup>18</sup>, a 3-to-4-week assessment with a somewhat dubious methodology. ADS tried to fix this with the TIPS series and the ADS 200 revision. This was part of a USAID-wide effort at "reengineering", beginning in 1994 and restructuring the procedures and methods of planning and evaluating activities. This was the result of a long process of organization learning and had as a primary objective "outsourcing" the implementation of activities.

The whole point of the revised ADS policies is to direct all measures of performance and monitoring at the SO level instead of the activity level. This stems from evaluating the performance of the SO teams, regional bureaus and operating units by verifying if they met the SSOs, which are the precise results that USAID is held accountable for by the Congress. Because of the magnitude and complexity of the internal formal and informal rules that mold the contractual relation between USAID and Congress, as well as the almost impossible task of evaluating each and every activity pursued by the agency<sup>19</sup>, it was only natural to 'proxy" these high monitoring costs by a more simplified but second-best option which is an SO target. The associated cost to this policy is that the aggregate nature of such a performance measure gives space for the missions to mitigate the bad performance in some tasks and exalt their positive results.

This effect is magnified by the fact that evaluations are not a requirement anymore and it is up to the mission to decide not only if they want to conduct an evaluation but which methodology to use<sup>20</sup>. According to an assessment of the evaluation practices at USAID by Clapp-Wincek and Blue (1999), it seems to be that field missions complained about external evaluations, saying that setting them up was an excruciating task plagued by bureaucratic documentation like the Project Evaluation Sheet (PES). The reaction from USAID should have been towards lowering the transactions costs of evaluations through streamlining the cumbersome process to assess projects, but instead they chose to eliminate the requirement of an external evaluation.

The institutional problems and constraints within USAID are a well-known issue for the agency, which prompted a re-assessment of its "reform vision", explicitly calling for a "more effective work with our implementing partners" and "improving our internal processes so that they are less costly to operate..." This incited the Results Review and Resource Request (R-4) process in which USAID tried to move towards a more *performance* oriented management. The R-4 reporting requires indicators and targets at all stages of the implementation of an activity,

<sup>&</sup>lt;sup>18</sup> See Clapp-Wincek and Blue (1999).

<sup>&</sup>lt;sup>19</sup> The average number of components per project in our sample was between 3 and 4.

<sup>&</sup>lt;sup>20</sup> See the ADS 200 series, Chapter 203 and TIPS PN ABY 214.

and need to be set at least one year before the actual reporting. Again, these indicators are set by the mission, possibly making the performance measure "dependent on the outcome".

Prior to the ADS guidelines revision and the R-4 process, the documentation requirements were very different. The missions had to send to USAID/WDC a series of documents at each stage of the activity implementation and design. The representative documents were a project design, an evaluation, a loan/grant agreement and a final report or project completion report. These were ultimately filed at USAID's DEC, a data collecting facility. There were some advantages to this process, one of which was the centralized availability of disaggregated data on performance. Even though this information still exists for every activity, it is at the mission level.

#### 3. A database to evaluate institutional performance

In order to test the hypotheses laid out in the previous section, one needs to construct a database that can capture the institutional determinants of the aid process to SMEs at a micro level, i.e., at the activity level. Some of the data can be compiled from existing sources; other variables require collection efforts. In this section we describe the database we endeavored to create under the Forums Project and our efforts to collect the data and why these efforts ultimately were unsuccessful. We then summarize what results we were able to infer from the data we were able to obtain, such as it was.

#### 3.1 Description of the ICID database

In order to carry out the empirical applications, we must identify a set of variables or proxies to capture the salient characteristics that affect project success in the aid cycle of USAID. The variables selected to describe an organization and its transactional interfaces should reflect only those characteristics that NIE predicts would strongly influence the contribution to the probability of success for an activity. Therefore, we are interested in collecting variables that describe the characteristics of the actors—and the means to monitor and control them, the institutional arrangements that bind them, the contract types, as well as proxies for transaction costs and information flows within the aid process in a given component.

We have designed a database of five datasets that would encompass most of the relevant variables.<sup>21</sup>

<u>Project-level data</u>. This dataset would comprise all the relevant characteristics that are common to all tasks within the project or activity. Among variables included are the name of the country, the project time period, its cost (and type of funding, e.g., if from earmarked funds), who the prime contractor was, whether other donors co-financed it, who the beneficiaries were and their location (urban/rural), whether the project was amended, and, whether a formal evaluation had been funded (and whether it actually took place).

<u>Task-level data</u>. Each activity comprises several project components—which we refer to here as "tasks"—that can be viewed as smaller sub-projects, often with different implementers. This dataset includes variables that are task-specific within a given project, attempting to capture the incentives and contractual characteristics in both the interaction with USAID/WDC and the implementer. Among these would include the project code, the type of task (e.g., technical assistance, investment promotion and planning, etc.), implementer name and type of contract (if under a sub-contract), as well as the amount of USAID funds involved. Much of this information usually appears in the design document's financial statement. Note that characteristics common to all tasks within a project do not appear here, but in the project-level dataset.

The key variable in this dataset—and perhaps the most difficult to collect of the data required for our approach—concerns the measurement of the project's result, output, or degree-of-success. <sup>22</sup> It is this task characteristic which provides the left-hand-side (endogenous) variable in our econometric analysis, below. A proper measurement of this task characteristic is crucial to our whole enterprise. Ideally such an indicator would be established in advance for each type of technical assistance. As a second best, the measure would be set prior to a project's implementation. Toward this end, there are two challenges facing a designer of success indicators in the future, one conceptual and one statistical.

Conceptually, there is probably no single, systemic, sufficient statistic that fully captures the various dimensions of an activity's degree of success. To appreciate this, one need only recall that USAID typically dispenses foreign aid to fulfill more than one strategic objective (the so

Note that these datasets should be interlinked in such a way that the unit of observation is the task in a given activity.

<sup>&</sup>lt;sup>22</sup> The following discussion draws on Zinnes and Bolaky (2002).

called "SO"), each with a multitude of intermediate results (whose fulfillments are, themselves, considered measures of success). Likewise, we may evaluate an activity in terms of its sustainability as well as its effectiveness. There is no reason why the attainment of a high score on the former ensures the same for the latter—or vice versa.

We may address these issues in several ways. The first is to accept that we are forced to use a compromise metric of success. In this case, following Zinnes et al. (2001a) we may design a single indicator of success that is constructed by aggregating (either arithmetically or statistically) measures capturing the different dimensions of success. Alternatively, following Zinnes et al. (2001b) we may develop a set of measures of success, each capturing a different dimension of success. In this latter case, while no single estimate would be sufficient, together they would tell the complete story. Either way, we maintain objective transparency since we are able to trace back through the "recipe" or variable reduction technique employed (e.g., principal components analysis), as the case may be, to explain exactly why each task scores as it does. For example, suppose we want to investigate whether an activity that develops the financial sector in a Third-World country has been successful. Following the first case, we might run a factor analysis or take a weighted average of variables to create a single, aggregate outcome measure. Here variables might include changes in the number of accounts and total deposits over time, growth in number of banks and branches, number of bank failures and percent of population within five miles of a bank branch<sup>23</sup>. Following the second case, we would keep these several constructed measures of success separate, since each one elucidates a different aspect of the story.

The second challenge for the future development of a success indicator is *statistical*. This refers to balancing the tradeoff of time and cost of data collection with the increase in accuracy which a more-data-intensive measure would provide. For example, in the illustration just cited above, the data on deposit rates or number of branches and banks may only be available for a limited number of regions in a given country or for a limited number of years per country. Generally, the more data (observations) we collect, the more representative our sample of the population under consideration. A high number of observations increases the reliability of our esti-

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<sup>&</sup>lt;sup>23</sup> For simplicity, we ignore the fact that some of these variables would have to be properly deflated to make them comparable across countries.

mates. Our approach endeavors to address these concerns by "pooling" observations across the countries for which we have data and by conducting one study across the countries.<sup>24</sup>

The above discussion focuses on considerations for the future where the project has yet to be executed. However, we believe that much can still be achieved by designing success proxies retrospectively, that is, for already completed USAID activities. This is less difficult than it first seems once one realizes that the goal is not to judge a particular project but to use information on a large number of projects to assess the impact of project characteristics and institutional factors *per se* on outcomes (degree of success). Let us offer some examples.

As one example, during the 1980s and early 1990s many projects were subject to midterm and final evaluations by outside experts, comparing outcomes to objectives stated in the original scope of work. Though these reports resulted in subjective evaluations, the evaluations could be used construct a consistent proxy indicator of success by coding the experts' opinion of the degree individual tasks within a project achieved their objectives (e.g., 0=failure, 1=underachieved, 2=achieved, 3=over-achieved). Using the same source, a cruder set of indicators could be constructed as dichotomous variables: was the task completed (yes/no), was the project finished on time (yes/no), and was the project finished within budget (yes/no)? Finally, where tasks produced many units of output (e.g., bureaucrats trained, NGOs strengthened, SMEs marketed, farms provided with extension services) then a proxy could be constructed from the number of units produced/serviced, scaled by a measure of the cost of the task.

As a second example, during the second half of the 1990s, USAID activities were subjected to the R-4 system of project management. Here, planned targets and actual results were (theoretically) recorded and collected at enormous expense for the individual tasks within each project over the period. These data now reside at the missions, with USAID/WDC in possession of only the aggregations at the SO level. Albeit highly imperfect, this information could be used to construct task output indicators which, if analyzed for a large number of tasks as we propose, would be suitable for undertaking the various analytic proposals described in this paper.

<u>Field Mission and Country-level data</u>. Because we want to control for differences in field mission specific factors affecting project success, we need to collect data on each USAID mission, including its level of funding, number of staff, presence of key skills (e.g., staff economist

<sup>&</sup>lt;sup>24</sup> This typically requires including country "dummy" variables to control for country-specific effects (panel data analysis).

or lawyer), years in existence, etc. It also contains pertinent socio-economic country-level panel data like GDP per capita, population density and civil liberties index, just to name a few. We used the World Bank Development Indicators to compile these variables.

<u>Implementer-level data</u>. This is the counterpart to the mission-specific dataset. It tries to include all the structural factors that affect the mission-implementer side of the aid process. The variables seek to proxy the institutional and idiosyncratic characteristics on the contractor side of the activity implementation process, including variables like ownership structure (i.e., for-profit, NGO, etc), past experience with USAID, size of firm, age of firm, whether has worked in the country within which the project occurred, among others.

<u>US Government-level data</u>. We know that project success is also influenced by the institutional arrangements within USAID, and the interaction between USAID/WDC and the missions do affect the odds of success of the projects. We tried to gather variables on the foreign policy objectives of the USG and of USAID, which party was in power at the moment of project planning, overall budget of USAID, whether the US economy was in a period of recession or expansion, overseas development assistance priorities in force, etc.

#### 3.2 Team data collection efforts

In order to collect the data, we used two approaches: first, for projects before 1994 we tried to take advantage of the documentation requirements in place between 1977 and 1993. Specifically, we used the design document, loan or grant agreement, evaluations (midterm and final if available) and the final report. The design document was the main source for planned objectives whereas the final report usually contrasted these intended targets against the actual outcomes. These documents are filed at the USAID Library and the Document Experience Clearinghouse (DEC), the two places where most of the data collection efforts took place.

For projects after 1994, the data collection was very challenging. After the ADS revised guidelines in 1993/4, the documentation requirements changed dramatically, moving towards a more decentralized approach. Most of the data and documents are now at the mission level as missions are no longer required to send them to Washington. Furthermore, the decision on

whether to carry out a project evaluation is now at the discretion of the *mission*; it is not compulsory to submit to DEC most of the documents that we used for the 1977-1994 period.<sup>25</sup>

#### 3.3 Summary of descriptive analysis of data obtained

Though it was not possible to collect all the data that was needed for the econometric analyses proposed in this paper, certain stylized facts are worth mentioning. They also help to explain at least in part why the data collection efforts were themselves unsuccessful. Out of the 109 SME projects<sup>26</sup> we used to construct the database we encountered the following problems:

#### i. Missing documents

- ✓ At least 32 percent of projects don't have Project Documents. Some of these documents were part of "small" projects<sup>27</sup>, and even though ADS guidelines in place at the moment required these documents to be produced, many times only a loan/grant agreement was signed.
- ✓ Over 50 percent of the Final Reports are missing from the files at the DEC. Acquisitions personnel at DEC confirmed that these documents were either not filed or lost.
- ✓ At least 23 percent of the evaluation documents are missing, as are 27 percent of Loan/-Grant agreements. These are the documents that assess midterm performance and proxy for the monitoring effort of the Agency.
- ✓ At least 23 percent of the projects are missing *both* the Project Document and Final Report. Obviously, these projects cannot be assessed in any dimension, as these two documents gather the planned and actual outcomes of the activity and its tasks.

#### ii. Incomplete or inconsistent evaluations

✓ Some tasks or activities within a project were not evaluated at all (e.g., Projects 6120219, 6110220, 5320001 and 5270317; see the appendix for an exhaustive list). This is probably an indication of the misalignments in the contractual arrangements between the agency and the missions as the latter get to choose which activities and tasks to evaluate.

<sup>&</sup>lt;sup>25</sup> The authors contacted several missions to try to collect the data that we needed for the estimation, but unfortunately they received no responses.

<sup>&</sup>lt;sup>26</sup> These 109 SME projects cover only the period 1977-1993 and include activities that had at least one *component* related directly to SMEs.

<sup>&</sup>lt;sup>27</sup> Projects 2630264 "Growth through globalization" in Egypt; 6750215 "Rural enterprise development" in Guinea and 6360171 "Small enterprise development and training" in Sierra Leone are just a few examples.

- ✓ Many of the evaluations do not have the actual cost in the Evaluation Summary/Document. Though this amount can be eventually tracked down through annexed financial statements from other documents like the final report, it posed a non-negligible search cost on the authors' team.
- ✓ Many of the success measures proposed in the Project Document did not match the actual indicators used in the Final Report by the evaluator. Fortunately, this has been corrected in recent reviews of the ADS planning guidelines and the TIPS series.

#### iii. Vague, if any, indicators of success

- ✓ The problems ranged from ill-designed measures (as impact on GNP) to indicators with trivial targets (e.g., a task that called for technical assistance to SME managers had an indicator of success that only required at least one course to be given. See Project 5110486, Bolivia).
- ✓ Regarding the elusiveness of the indicators, one project evaluator (Project 5320120, Jamaica) made a remark that caught our attention, "[for this project,] it was the first time that they had quantitative targets to assess...USAID generally does not require this".
- ✓ USAID/WDC possesses only the aggregate R-4 success indicators, the missions holding the project-level disaggregated data. Our analysis is on the project level so the latter were critical. However, of the dozen missions contacted, none would provide their data. <sup>28</sup>

#### iv. Apparent excess discretion by those in the field

- ✓ There were several projects with numerous amendments, up to 22 in less than 3 years. These amendments ranged from no-cost extensions of the PACD to a complete redesign of the nature of the project.<sup>29</sup>
- ✓ Intermediate results are at the mission level and only report aggregate SO-oriented results. This can constitute a truly NIE problem as this policy (in combination with the discretion to evaluate only some activities within a project) might allow for *ex post*

<sup>&</sup>lt;sup>28</sup> In fact, only one mission even acknowledged our requests for the information.

In fact, only one mission even acknowledged our requests for the information.

29 In the volatile world of economic development, some redesign of projects is to be expected. Our point here is the degree this was observed.

- opportunistic behavior on the side of the missions by 'shading' the performance of the activities by using biased aggregate indicators of success.
- ✓ Planned funds for evaluations were usually *very* high relative to the actual amount spent. Missions seem not to have had the incentive *ex post* to carry out the evaluations. One possibility is that in the RFP (i.e., the bidding) stage, the amount of funds planned for evaluations can be used as a signal of USAID's *ex ante* commitment to monitor the activity.

From the projects we collected we found that before 1994 evaluations were mostly done by US firms while task implementation was usually done by local entities, the latter often created solely for the purpose of implementing the project. The advantages of this approach were clear: local knowledge and informal rules are fundamental for implementation success. The new ADS guideline changes this by contracting with mostly US firms and delegating the search for local knowledge to them. The effect of this policy is ambiguous: the principal (USAID) is engaging in a repeated interaction with competing implementers (agents) and, though an optimal contracting rule will guarantee good performance (viz. effectiveness) on average, there are questions related to the impact this change will have on the sustainability of the projects in the beneficiary country.

## 4. Sample applications of ICID tools and models to USAID

In section 2 we discussed many questions that originate from the NIE framework applied to USAID's aid cycle. In this section we intend to take a closer look at a subset of those questions with the purpose of clarifying their structure and implications in the context of an informal game-theoretic setting.

#### 4.1 Contractual ("procurement") incentive effects on project outcomes

We begin by illustrating how to use our approach to examine the impact of alternative contractual arrangements on project outcomes.

<u>Motivation of the issues</u>. NIE theory would predict that the nature of the contract between implementer and USAID could influence the likelihood of project success during the implementation stage of an activity. To illustrate the type of issues in this regard to which our approach is amenable, consider the following practical questions:

- Does the type of contracting and payment mechanism matter in project performance?
- Does it make a difference to the outcomes whether the contractors are given a cost-plus or fixed-fee contract?

Empirically based answers to these and similar questions would have broad bearing to wide range of USAID projects.

<u>Analytic narrative</u>. In order to address these questions, let us concentrate on the structural determinants of the aid cycle as described in section 2. This requires that we broaden the setting to include not just the relation between the missions and the contractors but also the interaction between USAID/WDC and the field missions and their impact on project performance.

To facilitate the characterization of the optimal contracts between USAID/WDC and the missions and between the mission and the implementer, we can think of a game with two stages and the following timing: first, USAID/WDC delegates the implementation of an activity to a field mission. Then, the field mission optimally chooses a project design and contract type, runs the procurement and selects the implementer from a pool of firms who will carry out the tasks in the activity. Finally, the implementer can accept or reject the mission's offer.

The first stage comprises the interaction between USAID/DC and the field mission. When DC delegates the implementation of a specific activity to a mission, a *moral hazard* problem ensues: not only is the "effort" level of the mission—interpreted as its competence in the planning, implementation and evaluation process of a given activity—inherently unobservable by USAID/WDC but the attainment USAID/WDC objectives depend on the mission's actions. The optimal contracting practice in this case is to have the field mission's payoff (e.g., securing more funds in the future) to depend on their performance. Because of the bureaucratic nature of the Agency, we cannot apply directly the notion of financial incentives in a literal sense, so the equilibrium contract in this stage between USAID/WDC and the mission can be characterized by a mix of performance-monitoring by USAID/WDC and a governance structure that enforces optimal performance.

<sup>&</sup>lt;sup>30</sup> In the microeconomic literature, one defining aspect of the timing in a moral hazard game is that the state of nature is revealed to the players after the contract is signed. This makes the payoff to USAID/WDC contingent on both the actions of the mission and the realized state of nature.

Note that the set of rules and enforcement environment that govern the relation between these two parties (e.g., the amply cited ADS guidelines and TIPS series) are an *informal contract*.

Focusing on the second stage, the mission confronts a *monopsonistic screening*<sup>32</sup> problem when choosing the implementer. Here, the field mission problem is to offer a set of contracts to carry out the implementation of an activity, so that the most productive firm(s) will optimally self-select from the pool of contractors<sup>33</sup>. After the implementer is selected, then a moral hazard problem takes place, as the fulfillment of mission objectives will depend on the performance of the implementing firm. On top of the self-selection requirement, the optimal contract has to be *incentive-compatible*, i.e., the compensation schedule for the implementer has to be designed in such a way that she will choose to exert the highest effort possible when carrying out the tasks of the activity. Note that a fixed-price contract will never encourage high effort on the implementer side when their actions are not observable <sup>34</sup>.

This problem is plagued with *ex ante* and *ex post* informational asymmetries. A way in which USAID can attenuate these information problems is by optimally investing in some kind of monitoring device, i.e., in third-party evaluations of projects. Evaluations can complement the effectiveness of compensation schedules and tackle the main cause of this hidden-action issue. If the monitoring is left to the mission discretion, they may have incentives to "evaluate" only those projects that have a higher probability of success, biasing the overall conclusions USAID/WDC might draw from the evaluation process.

In summary, the missions should design a mechanism<sup>35</sup> to screen and separate the more productive firms from the low-productivity types, and also give incentives to the implementer in order to induce an optimal execution of a project. As a concrete example of the class of contracts that can achieve the first goal and at the same time decrease the search costs involved in the screening process is given by the Indefinite Quantity Contract (IQC) that USAID currently uses to pre-qualify a contractor.<sup>36</sup>

It is crucial to understand that the field missions will design these optimal mechanisms only if USAID/WDC provides the appropriate incentives for them to do so. This reasoning

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<sup>&</sup>lt;sup>32</sup> Because the mission is on the demand side, we call the problem monopsonistic and not monopolistic. See Mas-Colell *et al.* (1998) and Maskin and Riley (1984) for applications and extensions of this setting.

<sup>&</sup>lt;sup>33</sup> Ex ante, the productivity of a given implementer is assumed to be unobservable to the mission.

<sup>&</sup>lt;sup>34</sup> This is a well known result in contract theory. See Salanie (1998) for a complete treatment of this matter.

<sup>&</sup>lt;sup>35</sup> In microeconomic theory, adverse selection and screening issues are known as mechanism design problems.

<sup>&</sup>lt;sup>36</sup> Rather than bid on a single project, the so called "IQC" allows USAID to run a procurement on a set of more general activities and, typically, to pre-qualify (award the contract to) one or more consortia of implementers. No activities are funded or carried out until a mission brings its own budgetary resources to the table and selects a team from one of the winning IQC consortia. Thus, the IQC's primary purpose is to save time having to run a procurement.

implies that not only the interaction between field missions and implementers matter for the success of a project, but the governance and incentive structure within USAID also play a defining role in a given activity's success.

*Econometric model.* Analytically, we know that factors like the type of contract, payment scheme and evaluation matter, but an open question remains: what is the impact of variations in these factors on project performance? Let us describe the empirical side to this story.

When it comes to estimating a model where we need to explain a qualitative variable like the success or failure of a project, we can consistently estimate the parameters with a probit specification<sup>37</sup>.

In the case at hand, we want to estimate a model with a qualitative dichotomous dependent variable, the probability of success, S of a given project task. Theory tells us that S should depend not just on the idiosyncratic characteristics of the task and the project, but also on the institutional arrangements captured by the contractual and informational characteristics of the activity. Of course, the success or failure of a project is also affected by aggregate variables like those related to the particular country where the activity is implemented, as well as variables related to the US government and USAID.

Our model can be succinctly described by the following equation:

$$S_{i,t} = b_0 + b_1 T_{i,t} + b_2 P_i + b_3 G_i + b_4 C_i + b_5 I_{i,t} + e_{i,t}$$
 (1)

where:

 $S_{i,t} = \text{observed probability of success for task } t \in [1,N_i] \text{ of project } i \in [1,M]$ 

 $N_i$  = number of tasks in project i

M = number of projects

 $k = k^{T} + k^{P} + k^{G} + k^{C} + k^{I} = \text{number of regressors}$ 

 $T_{i,t}$  = vector of  $k^T$  task-specific variables<sup>38</sup>

 $P_i$  = vector of  $k^P$  project-specific variables

 $G_i$  = vector of  $k^G$  US government variables

 $C_i$  = vector of  $k^C$  country-specific determinants

See Heckman (1979) or Amemiya (1978) on consistency procedures for probit analysis.
 Keep in mind that a "project", i.e., that which an implementer bids on, may comprise many "tasks".

### $I_{i,t}$ = vector of $k^I$ implementer-specific variables

and  $e_{i,t}$  is a normally distributed disturbance<sup>39</sup>, which can be interpreted as all the other influential but non-systematic factors of project success not included in the model.<sup>40</sup> (Bolded variables indicate vectors.) The parameters of this model—the  $b_o$  through  $b_5$ —can be estimated by maximum likelihood<sup>41</sup> or, equivalently, by non-linear least squares. In this probit model the index i represents a given project and t a given task within the former, for a total number of observations of  $\sum_{i=1,M}(N_i)$ .

<u>Using the model in the USAID context</u>. Before delving into further detail about the empirical model, it is important to discuss the appropriateness of alternative success criteria for an activity. Though there is clear subjectivity to this choice, having indicators of success with planned targets from the project design document and actual outcomes from the final report induce a natural metric of success that is independent of the modeler. One way to build this index is to use an observed dichotomous variable (as determined by the institutional- and task-specific variables) as a proxy for the true probability of success, which is unobservable. (One should not use this empirical model, however, to predict the probability of success of a given out-of-sample project.)

Note that there are some shortcomings to a dichotomous indicator of success induced by the project design document and the final report. Success can in part be attributable to exogenous shocks, both aggregate (country-specific, like the quality of existing credit institutions) and idiosyncratic (project- and task-specific). Also, given the nature of some projects, like technical assistance and regulatory assistance, the outcome might take longer than the life of the activity.

The average length of a project in our sample is less than four years. One would expect, however, some projects like 5220241, 5110486 and 5190302 (see appendix for details) to show its benefits years after the implementation<sup>42</sup>.

In order to test the impact of the type of contract on the odds of project success we can do the following: vector P contains the type of contract that the mission and implementer signed

<sup>&</sup>lt;sup>39</sup> This assumption on the density of  $e_{it}$  is what makes this a probit model.

<sup>&</sup>lt;sup>40</sup> We counsel the reader to pay careful attention to the number of subscripts a variable has and whether the variable is a vector (in which case it is bolded) or not.

<sup>&</sup>lt;sup>41</sup> Depending on the model at hand and the definition of the success criteria, the likelihood function may be difficult to maximize numerically.

<sup>&</sup>lt;sup>42</sup> This drawback has been corrected in part by the recently revised ADS 200 policy guidelines that require the report of intermediate results.

(e.g., IQC, grant, cost-plus, etc.) so we can define a dummy-type variable to directly test this hypothesis. An analogous test can be used for testing the impact of evaluations.

A last comment on model specification comes to our mind when we take into account the incentives within USAID in the planning and evaluation process. In light of the analytical framework of section 2, it is possible that missions only evaluate those activities which are more likely to be successful. If and only if this is the case, we would be in the presence of a sample selection issue, i.e., we observe the indicator of success only if the probability of success is "high enough". This implies that the model has two regimes, one in which we observe *S* if the probability is above a given threshold and we don't observe it if below. Under these circumstances the estimation procedure is vastly different, as it should take into account this information. In this case, the proper way to estimate the model would be by using a two-step Heckman procedure.<sup>43</sup>

#### 4.2 The effect of contract amendment and renegotiation on project outcomes

Let us consider the complex issue of contract amendment and renegotiation, which NIE suggests should have an important bearing on project outcomes.

<u>Motivation of the issues</u>. How are outcomes affected when there are "rules to change the rules"? Because technical assistance outcomes depend in part on the actions of agents outside the control of the implementer, it has been necessary for USAID contracts to contain provisions of how the contract would be modified under different sets of unforeseen contingencies. Such contingencies could result in work being delayed or finishing early, tasks being made more or less ambitious, and goals being changed in the face of new opportunity.

USAID has several rules known in advance to all. These include an array of types and degrees of contract amendments, no-cost extensions, and renegotiations. From an institutional perspective, it is natural to ask whether such devices lead to strategic or opportunistic behavior. Do certain types of contracting mechanisms, technical assistance, sectors, etc. seem *ceteris paribus* to experience these "problems" more than others? And should these even be considered problems?

<u>Analytic narrative</u>. Broadly speaking, these sorts of issues may be analyzed within the frame work of a "commitment problem". The idea is that of a "hold-up" with two-sided invest-

<sup>&</sup>lt;sup>43</sup> There are several technical issues regarding sample selection and the estimation procedure. One of them is if we are able to observe the sample selection or not. This would affect the definition of the likelihood function.

ment between the mission and the implementer. A hold-up problem may arise even in the absence of asymmetric information or any PA setting. The main features of the problem are the impossibility of writing a long-term contract, failing to adequately define the *ex post* property rights of the gains from trading, and forcing the parties *ex ante* to hold-up their investment in resources and effort in a given activity. It seems to be common practice to have "escape clauses" in some contracts, which allow a re-assessment of the final payment because of the impossibility to foresee all possible contingencies in the life-span of the project (i.e., the contract can be renegotiated when the payment is due). Our review of projects (in the Appendix) suggests that renegotiations take place frequently in cost reimbursable contracts, for example.

Add the possibility of asymmetric information and moral hazard and it becomes clear that scope for opportunistic behavior is great. USAID will have trouble inferring whether the existence of the rules for amendments, extensions and renegotiation have increased the incentives for implementers to take advantage of their favored informational positions.

<u>Econometric model</u>. There are really two empirical issues here which need to be disentangled. First, we would like to know whether projects experiencing rene gotiation *ceteris paribus* result in better outcomes than those that forego it. Here, it is not enough to prove that on average amended projects fare worse than unamended projects. This is because we do not know what the correct counterfactual is. Perhaps, had the project not been amended an even worse outcome would have occurred. Thus, as we shall see, these "simultaneity" subtleties make lead to more complicated econometrics.

Second, we would like to know whether the addition of renegotiation options itself leads to more renegotiation. Here, the challenge is to find like projects to compare. If we compare similar projects, one done at a time when there was no option for renegotiation and the other during a time when there was, then we run the risk of overlooking other factors which may have influenced outcomes during these different time periods. Likewise, if we compare projects using different contracting mechanisms, one allowing for renegotiation and the other not, then we are faced with the issue of why these similar projects were let under different contracting mechanisms.

$$T_{i,t} = a_0 + a_1 T_{-i,t} + a_2 P_i + a_3 G_i + a_4 C_i + a_5 I_{i,t} + \mathbf{n}_{i,t}$$
 (2)

where  $\mathbf{n}_{i,t}$  is the (assumed) probit-distributed error term,  $a_m, m \in [0,5]$  are coefficients (the bolded are vectors) to be estimated,  $\mathbf{T}_{-i,t}$  refers to the fact that we have pulled out the (dummy) variable indicating whether the task was renegotiated or not (see  $T'_{i,t}$  in equation 3), and the other variables are as described in section 4.1.

Next, we hypothesize that the probability of success of a task depends on both the probability of renegotiation as well as whether the task was in fact renegotiated ( $T'_{i,i}$ =1 if renegotiated and 0 otherwise) so that

$$S_{i,t} = d_o + +d_1 T^*_{i,t} + (d_2 T'_{i,t} + d_3 T_{-i,t})$$
  
+  $d_4 P_{i,t} + d_5 G_{i,t} + d_6 C_{i,t} + d_7 I_{i,t} + e_{i,t}$  (3)

where  $T^*_{i,t}$  is the estimated probability of  $T_{i,t}$  as predicted by equation (2),  $\mathbf{e}_{i,t}$  is the (assumed) probit-distributed error term,  $d_m$ ,  $m \in [0,7]$  are coefficients to be estimated, and  $T_{-i,t}$  refers to the fact that we have pulled out  $T'_{i,t}$ . Equations (2) and (3) form a simple system which may be solved recursively.

<u>Using the model in the USAID context</u>. In this specification we may test our null hypothesis that where a mission uses renegotiation, given that renegotiation is an option, it has no impact on outcomes. To do this we perform a test of the statistical significance of  $d_2$ . If significant then we "accept" the alternative hypothesis, namely that if positive, then the availability of the option of renegotiation has a positive role to play in improving outcomes; if negative, the availability of renegotiation is deleterious.

We may add that this approach may be fine-tuned in several ways to provide more context-sensitive tests. First, we can modify this approach to determine if the results are only

<sup>&</sup>lt;sup>44</sup> As explained in section 3.3, inability to acquire critical data from the field missions hindered the authors from fully developing a narrative.

<sup>&</sup>lt;sup>45</sup> Here an underscore has been used (required to add emphasis to an already Italicized word) to stress that the model refers to the probability *before* the project is begun.

<sup>&</sup>lt;sup>46</sup> The placement of the variable for contract type is somewhat arbitrary, depending on whether it is task-specific, as it may well be here, or project-specific as it was in section 4.1.

specific to a particular characteristic. For example, one could test whether rene gotiation is only deleterious (say) in Africa or whether it only helps (say) in knowledge production project, but not (say) in technical assistance. In the first case, one would add the cross-term  $C_{i,t}$   $T_{i,t}$  where  $C_{i,t}$  is a dummy variable for Africa, and in the second case one would add the cross-term  $P_i$   $T_{i,t}$  where  $P_i$  is a dummy variable for a knowledge production project. Second, we can modify this approach to test the hypotheses regarding the degree of knowledge known about the implementer. Consider some examples. We could run the analysis leaving out all information about implementer type, corresponding to the standard bid situation where bidders are not pre-selected or short-listed. We could run the analysis using only information about the type of implementer, e.g., is it a university or a consulting firm. Or we could evaluate each of the bidders for a project to see whether the characteristics taken together of one creates a higher (lower) probability of success than the others.

We hope that these illustrative examples might pique the interest of those involved in preparing projects or selecting winners. However, if the tendencies inferred from this work are statistically significant and robust, the CDIE/PPC and the Administrator's office, charged with the overall efficiency of the Agency, have a mandate to require that bidder lists, selection criteria, and generic contracts provisions be modified to remediate the institution failures predicted. Likewise, **f** properly disseminated, these results would help missions to craft better terms of reference and the Contracts Department to provide better advice on contractual provisions to include or not, as the case may be.

#### 4.3 Does changing the rules make a difference: two cases, one technique

For this last example, we bring together two phenomena which may at first seem far-removed from one another, the history USAID project evaluation efforts and end-of-year funding requests for projects in the "pipeline".

<u>Motivation of the issues</u>. Insiders often say there isn't one fiscal "period" at USAID, but many. There is of course the fiscal year budget. But there tend to be others budget cycles as well. In particular, September can often be a frantic month at USAID, as COTRs endeavor to attract last-minute available funding for unfunded projects in their pipeline. To the extent that these projects had passed through the normal design and review processes, sudden funding may not be

problematic.<sup>47</sup> However, it is also possible that some projects put up for "September funding" have not been sufficiently vetted. For many reasons (e.g., topical fads, new interests of senior management) a bureau or mission may find itself proposing a project that might not have been proposed during the course of the normal budget preparation. Regardless, this raises the intriguing question, "Are September projects as effective as similar projects approved in other months?"

Though seemingly unrelated, USAID has implemented over the last 15 years several types of project and program evaluation "systems". Many of these have been described in earlier sections of this paper. According to NIE, changes in the monitoring regime should have an impact on outcomes. This raises the intriguing question, "Did a change in the post-project evaluation requirements change the observed effectiveness of projects of similar characteristics?" Since it appears USAID is once again seeking ways to prove the effectiveness of its activities, it may be worthwhile to consider first, whether post-project evaluation has ever been effective and, if it has, what characteristics of it were most worth emulating.

<u>Analytic narrative</u>. Here we may only address the "September Rush" since, for the second example, it would not be possible to assess the impact of a regime change without a more detailed specification of the nature of the change. We require only a small number of assumptions to generate an institutional equilibrium leading to a "September Rush".

First, there must be uncertainty about the size of the departmental unit's budget. This may occur for several reasons. Annual budgets and departmental allocations at USAID can often not be finalized until well into the fiscal year. Likewise, USAID sometimes reallocates an existing budget as priorities shift among countries, regions, sectors, and problems (e.g., a natural disaster occurs). Finally, within a department, there are situations in which the "burn rate" fails to meet what was forecasted.

Second, most organizations tend to operate on a ratchet principle or, what is essentially the same thing, on precedent. Thus, the surest way to receive a budget of one million dollars next year is to spend a million dollars this year. Spending less risks receiving less. Another aspect of bureaucratic behavior which operates in the same direction is that a manager's power within an organization is often related to the size of her budget. Again, more is better. The consequence for

<sup>&</sup>lt;sup>47</sup> Of course, it may still be the case that highly pressurized, last-minute, project selection leads to insufficient time to make the best choice or even that non-mission criteria enter the process.

our purposes of these observations is that there is going to be more pressure to spend funds at the end of the fiscal year than at the beginning.

The *third* assumption is that there is a tendency to select and fund the "best" projects before the (relatively) "worst." Here it is not important how we define "best" and "worst", only that the latter would not merit funding during the course of normal project selection for budgeting—and, of course, that we are able to tell good and bad project apart (at least for our analysis). It is also important to stress that a "bad" project may only be bad or poorly conceived in its design, not in the goals it seeks to achieve or even in its applicability to the region it is targeting. Moreover, "bad" may also refer to adding components with diminishing degrees of quality, rather than simply to additional sub-standard projects.

The *final* assumption to this admittedly simple—though, we believe, essentially correct—model is that there are frequent cases in which there are too few "good" projects prepared (in the sense of the previous paragraph) to meet the unexpected increase in departmental funding.

With all three of these assumptions in force one can establish a game-theoretic equilibrium which results in sub-standard projects being selected and funded. It is this result which we seek to detect in the econometric model which follows.

<u>Econometric model</u>. "Structural break" models are one type of econometric technique which could serve a useful purpose in the present context. These identify whether, once all other relevant characteristics have been "controlled" for, the outcome of a process has changed from one period to the next. For the case at hand, we could use these techniques to examine whether the effectiveness of a September project is different from other months or whether project effectiveness changed once the R-4 was adopted or once it was dropped.

Again building on the analytic narrative above and the methodology in section 2, we begin with the model of section 4.1 and augment it in two ways. First, we posit that a change in the evaluation process—be it a one-time occurrence in September or a permanent change as in when the R-4 process was introduced—simply had the effect of changing the probability of success by a exogenous amount, e.g., 10 percent. Second, we posit that such changes in the evaluation process may affect project or task outcomes more the greater (or lesser) is the presence of particular characteristics as captured by some of the variables within  $T_{i,t}$ ,  $P_i$ ,  $G_i$ ,  $C_i$ , and  $I_{i,t}$ . Examples of such characteristics are country (found in  $C_i$ ), type of assistance (e.g., tax reform or

"knowledge production" <sup>48</sup>, as perhaps captured in  $T_{i,t}$  or  $P_i$ ), and US budgetary conditions (found in  $G_i$ ). Let us refer to each of these regressors within the respective vectors of explanatory variables as  $T'_{i,t}$ ,  $P'_{i}$ ,  $G'_{i}$ ,  $C'_{i}$  and  $I'_{i,t}$  and "pull" these out of the original notations, which we will now write as  $T_{-i,t}$ ,  $P_{-i}$ ,  $G_{-i}$ ,  $G_{-i}$ , and  $I_{-i,t}$ .

With these modifications, we may write the probit regression model as described in section 4.1 as

$$S_{i,t} = c_0 + c_1 \mathbf{T}_{-i,t} + c_2 \mathbf{P}_{-i} + c_3 \mathbf{G}_{-i} + c_4 \mathbf{C}_{-i} + c_5 \mathbf{I}_{-i,t}$$

$$+ D_{i,t} \left( c_6 + c_7 \, \mathbf{T}'_{i,t} + c_8 \, \mathbf{P}'_i + c_9 \, \mathbf{G}'_i + c_{10} \, \mathbf{C}'_i + c_{11} \, \mathbf{I}'_{i,t} \right) + u_{i,t}$$

$$(3)$$

where  $u_{i,t}$  is the (assumed) normally distributed error term,  $c_m$ ,  $m \in [1,11]$  are coefficients to be estimated and  $D_{i,t}$  is a dummy variable equal to 1 in September (or as of the new evaluation regime) and zero otherwise.

In this specification we may test the null hypothesis of no change in evaluation behavior (no structural change) by checking whether any of  $c_6$  through  $c_{II}$  are statistically significant or by using an F-test regarding whether  $c_6$  through  $c_{II}$  are jointly different from zero. If either is the case (and the former implies the latter, though not the reverse), then we must reject the null hypothesis and accept the alternate, namely, that different evaluation criteria operate in September (or that the new evaluation regime has indeed influenced the success of projects).

<u>Using the model in the USAID context</u>. It is unlikely that any proposer of projects would have an incentive to investigate the hypotheses put forward here. As such, we would envision that this model would be utilized by CDIE in USAID for the purposes of informing senior management and, perhaps, the contracts administration.<sup>49</sup>

In the case that a "September Effect" is statistically present and reveals a reduction in the probability of project success, senior management would want to weigh carefully whether procedural change should be instituted to ameliorate the institutional incentives. Of course, if the incentives ultimately derive from their own directives to exhaust existing funding (say, to avoid returning it to Congress) then this analysis could then be viewed as a check that their managerial directives were having a systemic effect. This would likewise be for the case of the implementation of a new project evaluation system. It would be a powerful selling for senior management

<sup>&</sup>lt;sup>48</sup> This is the term USAID uses for "policy research".

<sup>&</sup>lt;sup>49</sup> Needless to say the GAO would be greatly interested as well, perhaps an impediment to its adoption within USAID.

when reporting to the Administration or to Congress that they might be able to "prove" that their enhanced management methods were objectively having a discernable effect.

### 5. Recommendations

This paper has provided a window into the vast opportunities for self-improvement through retrospective analysis open to USAID should it wish to pursue them. While at first, USAID might approach the proposals here as discrete *activities*, eventually the framework and diagnostic tools should be viewed more as part of a *process*. It is a process common to all entities who wish to survive and even prosper: how does one learn from one's successes and failures? The fact that USAID does not compete, as does the private sector, and the fact that most of USAID's bene ficiaries do not vote on the agency's budget–recipient evaluations of donors is not yet in fashionneed not prevent USAID from proving its worth to its paymasters, Congress and the US taxpayers.

While the possibilities are endless, below we make some suggestions which follow directly from the examples we have given. In all likelihood, USAID management would be even better qualified to set priorities for the application of the approach and techniques we have only just begun to touch on. Nonetheless we make the following suggestions.

First, USAID may consider funding a pilot project to develop the database described in Section 3 for a class of project activities. The activity should have sufficient upper level management support so as to encourage the field missions to provide the required information on past projects in the sector selected for analysis. Even if this proposal is not implemented, USAID should consider that PPC the DEC, or possibly an outside contractor prepare a dataset with all the disaggregated and project-specific R-4 data and that the missions be required to submit all previously collected R-4 data. That this has not yet been done raises into question the seriousness of past management's interest in mission performance and is the least one could do to benefit from the enormous investment cost of the R-4 process.

Second, either in conjunction with the first recommendation or as a separate activity, USAID may consider funding a project to establish a one-page form, to be completed by the COTR upon project start-up with the NIE information described in Section 3. The project should then "beta-test" the form for a limited number of (future) USAID projects prior to introducing it as a administrative requirement.

Third, we would encourage USAID to utilize the NIE framework *as a mindset* and not just as an analytic tool. Toward this end USAID may consider setting up an intra-agency committee, perhaps supported by outside NIE experts, to identify the possible conflicts between institutional objectives and incentives. In all likelihood, their mere identification will point to clear remediation strategies to resolve them.

Finally, USAID may consider implementing any of the analyses presented in the examples in section 4. The first one examines (i) whether the type of contracting and payment mechanism matter in project performance and (ii) whether it makes a difference to the outcomes whether the contractors are given a cost-plus or fixed-fee contract. The second one considers whether the type and degree of contract amendments, no-cost extensions, and renegotiations have a statistically discernable impact on project outcomes and whether these impacts depend on the type of contracting mechanism, technical assistance, or sector addressed.

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# Appendices

## A. Illustrative target indicators for a given task in a (non-random) sample of SME projects.

Project	Task	Indicator	Planned	Actual	Success
5170150	2	Number of loans	1000	841	0
0170100	7	Number of businesses with technical assistance (TA)	1000	616	0
	8	Number of businesses with TA	1000	616	0
5110486	2	Creation of fund	1 1		1
0110.00	8	Manuals and training courses	1	1	1
5180056	2	Number of jobs created	1300	2149	1
010000	5	Value added production	570000	600000	1
	7	No target			
	8	No target			
5180019	2	No targets			
	5	No targets			
	8	No targets			
	9	No targets			
5220205	2	Establish Financiera Industrial Agropecuaria (FIA)	1	1	1
		Number of loans	170	332	1
		Amount of loans	12700	9200	0
		Value added to GNP	12600	12000	0
		FIAs job creation	500	950	1
	8	Business Assistance System: number of organizations	6	22	1
		SME with TA	525	3746	1
5220241	2	Number of solidarity groups	750 258		0
		Jobs maintained or created	4350	775	0
	10	Form a Policy Technical Unit	1	1	1
5200380	4	Number of SMEs with TA	150	139	0
	8	Number of SMEs with TA	150	139	0
	9	Number of joint ventures	16	0	0
		American business linkage enterprise project (no. of firms)	25	41	1
		Trade and investment consultancies	20	0	0
		Employment generation	4500	3000	0
		New investments	450	1324	1
5320120	2	NA	NA	NA	
	6	Sq. ft. of industrial construction	324500	166000	0
	6	Sq. ft. of commercial construction	71500	111000	1
	7	NA	NA	NA	
5190302	8	Number of firms with TA	50	41	0
	8	Number of projects with TA	110	NA	

Notes: See next page.

Table A on the previous page shows that certain tasks were not required to achieve any target at all. Also, some targets simply called for the creation of a certain entity related to the project's purpose, but it was not required to attain any threshold of efficiency or quantifiable output. The last column shows a 1 if the target was exceeded or a zero if else.

Task number coding used in Table A

- 1. Market support and marketing
- 2. Credit and finance support
- 3. Inputs provision or facilitation
- 4. Technology support (technology transfer/upgrading, R&D)
- 5. Services (information provision, consulting/advisory, extension)
- 6. Providing infrastructure (physical)
- 7. Training
- 8. Technical assistance
- 9. Investment promotion and planning
- 10. Improvements in legal, administrative and regulatory environment

### B. Database description and data sources for the files

For projects before 1994, the main documents that gather all the information needed in the task, project and implementer datasets are:

- 1. *The document design or project document*: most of the data concerning aid appropriated total, starting dates, planned targets, implementer etc are contained in the face sheet of this document, the financial statement and the section explaining each component. From 1977 until 1993, these sections were standard.
- 2. *The Evaluation or assessment Document:* it contains most of the data regarding the evaluation costs and methodology.
- 3. *The Final Report:* this is the document that contains the actual outputs of each component of the activity, the date that the project ended, as well as the actual amount spent on the project.
- 4. The loan/grant Agreement document: we can use this document as an alternate source for the aid appropriated total if needed. We may use the date of disbursement here as the starting date instead of the one in the project document.

A more detailed description of the datasets is given below.

Project dataset and evaluation	Description
Project Number	Unique id code given at USAID for each project
Country	Country code
Project Title	Title that appears in the project document (PD)
3	Date when the project document was signed. Appears in
Exact start date	the bottom of the facesheet in the PD.
Exact end date	Date of publication of the final report
	Total grant and loan amounts to be disbursed by AID for
Aid Appropriated Total	the project
Grant	
Loan	
Other	
US	
Host country	
Other donor	
	If other donor present and is a multilateral, specifies the
Other Multilateral	name
	If other donor present and is a bilateral, specifies the
Other Bilateral	name
Project purpose description listed on project	
data sheet	
	Specifies if there has been an amendment to the original
Was the project changed	appropriated total or completion date
New funding amount	Extra amount disbursed if the project was changed
DATE CL.	Month day and year changed. Taken from PD
DATE Changed	amendments
T' 1134' '	Specifies if there was a field mission at the time of the implementation of the project
Field Mission Field Mission Previous Experience with	implementation of the project
implementer	
Field Mission Previous Experience with SMEs	
Was an evaluation carried out?	
Name of evaluator	Id of company doing the evaluation
Funds for Evaluation Actual	Actual cost to AID of evaluation. Data is in PES
Tunds for Evaluation Actual	From PD, the planned funds for evaluation from the
Funds for Evaluation Planned	financial analysis.
First Evaluation	Date of first evaluation
Midterm Evaluation	Date of midterm evaluation
Final Evaluation	Date of final evaluation
Is the project a continuation /follow on of a	
previous project	
Earmark Funding	
Discretionary Funding	
Did at least one of the contractors make	Experience of contractor with SME related projects in
similar project in another country	other countries
Beneficiaries Rural Based?	
Beneficiaries Urban Based?	
Funds committed to plant and machinery or	Fixed assets from the financial statement in PD or the
any fixed assets	Loan/Grant agreement

TASK DATASET	Description				
Task Id	Unique id for the project specific task				
	Component or activity in a given project. Classified into 10 different				
Task Number	categories with ad hoc enumeration from 1 to 10				
Project Number	Unique id number code given at USAID for each project				
Country	Country				
Description	Description of the project purpose according to the project document (PD) facesheet				
Funds 000's from AID	AID funds dedicated to the task				
Funds 000's from Other sources	Funds from other sources allocated to the task				
Implementer	Id of the implementer of the task or project				
Contract amount	Value of the task in dollars to be implemented				
Local?	Location or origin of implementer. Could be local or US				
Ownership Structure	Defines if the implementer is private, public or not-for-profit				
Type of contract	Defines if the implementer's contract is a loan, grant, IQC or cooperative agreement				
Experience in Country	Determines if the implementer has performed an SME related task in the past				
Output Indicator	Description of the quantitative or qualitative indicator of success for a given task as per the Final Report (FR)				
Planned Output	Quantitative or qualitative target to be achieved				
Actual Output	Indicator's actual result				

Country and Field Mission DATASET	Description		
Country	Country where the project is implemented		
Country CODE	2-letter country code		
Year			
Percentage of rural population	Source WDI		
Population density	Source WDI		
GDP Per Capita	Source WDI		
Black Market premium on exchange rate	Source WDI		
Private sector share of GDP	Source WDI		
Civil liberties index	Source WDI		
Official language	Source WDI		
Official religion	Source WDI		
Share of imports as percentage of GDP	Source WDI		
Share of exports as percentage of GDP	Source WDI		
Government deficit as percentage of GDP	Source WDI		
Morbidity	Source WDI		
Civil conflict	Source WDI		
Mission Director	Name of the mission director at the moment of signing the project document		
Field of Expertise	Field of expertise of the mission director		
Number of AID Staff	Number of employees in the mission, not including locals		
Importance of field mission	Share of AID funds allocated to field missions		

USG DC ODA DATASET	Description
Year	Series from 1970-1999
Country	Country code
	Overseas development assistance per year, per country.
ODA	Taken from the AID greenbook
Party in Power	Republican or Democrat in the White House
Name of Administrator	Name of the AID administrator
Expertise	Area of expertise of the administrator

IMPLEMENTER DATASET	Description				
Implementer	Full name of implementer				
ID	Unique code assigned to the implementer				
Project	Unique id number code given at USAID for each project				
Country	Country code				
Task					
Origin	Location of implementer				
Age	Number of years since established				
Experience with AID	Specifies if the implementer has worked with AID before				
Number of Employees	Number of employees at the time the project started				
Ownership Structure	Public, private, not-for-profit				
Type of Contract	Defines if the implementer's contract is a loan, grant, IQC or cooperative agreement				

### C. A list of SME projects and document availability.

This is the list of projects from 1977-1993 that we attempted to collect. The columns record the availability of a given document with an x.

Project number	Project title	Country	Project Document	Final Evaluation	Loan/Grant	Final Report
5050011	National development foundation OPG	Belize	х	х	х	
5050040	Private sector investment	Belize			х	
5110486	Productive credit guaranty program	Bolivia	x	х		х
5110596	Small enterprise development	Bolivia	х	х	х	х
5110637	Microfinance project	Bolivia	x		х	
5150176	Private sector productivity	Costa Rica	x	х	х	
5150247	Financial services	Costa Rica		х	х	х
5170154	Small business	Dominican Rep		x		
5170150	Small industry development	Dominican Rep	x	x	x	х
5170254	Micro and small business development	Dominican Rep	х	x	х	х
5180019	Non-traditional agricultural exports	Ecuador	х	х	х	х
5180047	Private sector development	Ecuador			х	
5180056	Small enterprise development	Ecuador	х	х	х	х
5180121	Microenterprise assistance and strengthening (MAS)	Ecuador		x		x
5190229	Small enterprises development	El Salvador	х			
5190216	Central marketing cooperative (PVO OPG)	El Salvador				
5190197	Small enterprise development PVO-OPG	El Salvador		х	Х	
5190286	Rural small enterprise development	El Salvador		х	х	

Project number	Project title	Country	Project Document	Final Evaluation	Loan/Grant	Final Report
5190302	Technical support to business	El Salvador			x	x
5190304	Urban small business OPG	El Salvador		x	х	х
5190322	Small enterprise development	El Salvador			x	
5190327	Agribusiness development	El Salvador	х	х	х	х
5190371	Technical assistance sub-project fund	El Salvador		x	x	х
5190387	Small enterprise support	El Salvador	х	х	х	х
5190397	Equitable rural economic growth (CRECER)	El Salvador	x	x		х
5190395	Technical assistance to businesses	El Salvador	х		х	х
5200245	Rural enterprises development	Guatemala	х	х	х	
5200341	Private enterprise development	Guatemala	x	x	x	х
5200337	Private sector development coordination	Guatemala		х	х	
5200380	Entrepreneurial development	Guatemala	х	x	х	х
5040107	Building equity and economic participation BEEP	Guyana	x	X		x
5210118	Haitian development foundation PVO-OPG	Haiti		х	х	
5210144	Haitian development foundation	Haiti		х	х	
5210223	Provincial enterprise development	Haiti	х	x		
5210256	Program for the recovery of the economy in transition (PRET)	Haiti	x	x		x
5220205	Small business development	Honduras	х	x	х	х
5220263	FUNADEH Pan American Development					
	Foundation	Honduras		x	x	x
5220241	Small business development II	Honduras	х	х	х	х
5320080	Jamaica National Development Foundation	Jamaica		х	х	
5320120	Inner Kingston Improvement Foundation	Jamaica	х	х		х

Project number	Project title	Country	Project Document	Final Evaluation	Loan/Grant	Final Report
5320108	National Development foundation expansion	Jamaica		x	x	х
5320135	Improved markets, export growth and					
	opportunities (IMEGO)	Jamaica	x	x	x	х
5240301	Economic growth and development (EGAD)	Nicaragua	x	x	x	x
5240313	PVO co financing	Nicaragua	x	х	x	
5250221	Employment planning and generation	Panama	x	х	x	
5250225	Small entrepreneurial development	Panama		х	x	
5260114	Productive credit guaranty	Paraguay	х	х		
5270176	Rural enterprises II	Peru	x	х		
5270241	Urban small enterprises development	Peru	х	х	х	
5270349	Microenterprise and small producers support	Peru	x	х	х	
5110596	Small enterprise development	Bolivia	х	х	х	х
5170150	Small industry development	Dominican				
5170254	Migra and small business dayslanment	Rep Dominican	X	X	X	Х
31/0234	Micro and small business development	Rep	x	x	x	x
5180019	Non-traditional agricultural exports	Ecuador	x	х	х	х
5180056	Small enterprise development	Ecuador	x	х	х	х
5190327	Agribusiness development	El Salvador	х	х	х	х
5190387	Small enterprise support	El Salvador	х	х	х	х
5200341	Private enterprise development	Guatemala	х	х	х	х
5200380	Entrepreneurial development	Guatemala	х	х	x	х
5220205	Small business development	Honduras	х	х	х	х
5220241	Small business development II	Honduras	х	х	Х	х
5320135	Improved markets, export growth and					
	opportunities (IMEGO)	Jamaica	x	x	х	x

Project number	Project title	Country	Project Document	Final Evaluation	Loan/Grant	Final Report
5240301	Economic growth and development (EGAD)	Nicaragua	x	x	x	x
5150247	Financial services	Costa Rica		x	х	x
5190304	Urban small business OPG	El Salvador		х	х	x
5190371	Technical assistance sub-project fund	El Salvador		х	x	x
5220263	FUNADEH Pan American Development Foundation	Honduras		x	х	x
5320108	National Development foundation expansion	Jamaica		х	х	х
5190395	Technical assistance to businesses	El Salvador	x		х	х
5190302	Technical support to business	El Salvador			х	х
5110486	Productive credit guaranty program	Bolivia	x	х		х
5190397	Equitable rural economic growth (CRECER)	El Salvador	x	х		х
5040107	Building equity and economic participation BEEP	Guyana	x	x		x
5210256	Program for the recovery of the economy in transition (PRET)	Haiti	x	x		х
5320120	Inner Kingston Improvement Foundation	Jamaica	х	х		х
5180121	Microenterprise assistance and strengthening (MAS)	Ecuador		x		x
5050011	National development foundation OPG	Belize	х	х	х	
5150176	Private sector productivity	Costa Rica	x	х	х	
5200245	Rural enterprises development	Guatemala	х	х	х	
5240313	PVO co financing	Nicaragua	x	х	х	
5250221	Employment planning and generation	Panama	x	х	х	
5270241	Urban small enterprises development	Peru	х	х	х	
5270349	Microenterprise and small producers support	Peru	x	х	х	